



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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Re application of: Curry, et al.

Group Art Unit: 2665

Serial No.: 09/514,371

Examiner: Nguyen, Steven H.D.

Filed: February 28, 2000

For: INTERNET LONG DISTANCE TELEPHONE SERVICE

Attorney Docket No.: 00-VE22.07A

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**APPEAL BRIEF**

Mail Stop Appeal Brief- Patents  
Commissioner for Patents  
United States Patent and Trademark Office  
Washington D.C. 20231

Dear Sir:

This appeal is from the decision of the Primary Examiner dated October 22, 2003 ("Final Office Action") finally rejecting claims 1-10, 12-22 and 28-37, which are reproduced as an Appendix to this brief. The Notice of Appeal was filed on April 1, 2004. This application was filed on February 28, 2000. Submitted herewith are two additional copies of this Appeal Brief.

**I. REAL PARTY IN INTEREST**

The real party in interest is Verizon Services Corp., Assignee, a corporation organized and existing under the laws of the state of Delaware, and having a place of business at 1095 Avenue of the Americas, New York, NY 10036.

**II. RELATED APPEALS AND INTERFERENCES**

Applicants are not aware of any related appeals or interferences that would affect the Board's decision on the current appeal.

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### **III. STATUS OF CLAIMS**

Claims 1-22 and 28-37 are pending. Claim 11 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form. Claims 1-10, 12-22, and 28-37 have been rejected.

### **IV. STATUS OF AMENDMENTS**

No Amendment After Final Rejection has been entered into the prosecution record of the present application.

### **V. SUMMARY OF THE INVENTION**

The invention of the present patent application relates to providing telephone communications over a wide area packet switched network, such as the Internet. More specifically, the invention relates to a method for establishing a communication link between a calling telephone and a called telephone over the wide area packet switched network.

Figure 6 of the application illustrates an exemplary telecommunications system 60 using a wide area packet switched network, which is a useful reference to explain the invention of the present application. The system 60 includes a plurality of switched telecommunications networks 62a, 62b, and 62c operating in different geographical regions. For example, each telecommunications network 62 may be a public switched telephone network such as a Regional Bell Operating Company, or a private communication network having a limited service area. Each network 62 includes a plurality of inter-connected switching systems 41 serving customer premises terminals 64, e.g., telephones, via local loop connections 66. Each telephone network 62 also includes a telephony server 72 that provides an interface between the corresponding telephone network 62 and the wide area packet switched network 74. Specification, pp. 29-30.

The system 60 also includes a routing and administration (RAS) server 80 that includes a routing and administration database for managing call routing translations and user access permissions. The RAS server 80 includes a database that stores all area codes

served by a given telephone system 62a, as well as the Internet address identifying the point of presence for the serving telephony server 72. Hence, the RAS 80 serves as a pointer to identify a destination telephony server 72 based on the area code of the called station. Specification, p. 31.

When a calling station 64c initiates a call to a called station 64a, the telephony server 72c processes the call by sending a routing request to the RAS 80 over the network 74. The RAS 80 accesses its database to determine the address of the telephony server 72a corresponding to the area code of the called station 64a. Then, the RAS 80 sends the IP address of the telephony server 72a to the telephony server 72c. In response, telephony server 72c sends signaling and/or voice traffic to the telephony server 72a by outputting data packets having the IP address of the telephony server 72a. Once received by the telephony server 72a, the signaling and/or voice traffic is recovered from the payload of the data packets and processed by upper-layer protocol to establish the communication link between the calling station 64c and the called station 64a via the wide area packet switched network 74. Specification, pp. 31-32.

In certain embodiments of the invention, the communication link is established via a predetermined path through the network 74 to maintain a prescribed service level, i.e., quality of service (QoS), for the calling party. That is, instead of allowing the various data packets of the same telephone call (or subsequent calls between the same telephony servers) to travel through different paths of the network 74 from the calling station 64c to the called station 64a – as is typical in a wide area packet switched network – all of the data packets are routed through the network 74 over the same predetermined communication path. Preferably, the predetermined communication path guarantees a certain minimum bandwidth and latency to ensure a certain quality of service. In this embodiment, the RAS 80 stores the predetermined communication path so that it can be used whenever a call is initiated between the same telephony servers. Specification, pp. 32-34.

## **VI. ISSUES**

1. Regarding independent claim 1, has the Examiner failed to establish a proper motivation for one of skill in the art to combine the alleged prior art references of US 6,243,373 to Turock (“Turock”) and US 6,298,057 to Guy (“Guy”)?
2. Regarding independent claim 35 and dependent claim 2, does either Turock or Guy teach a “predetermined communications path”?
3. Regarding dependent claims 2 and 37, does Turock teach a “routing and administration server having said routing and administration database”?
4. Regarding dependent claim 5, does Guy teach “the guaranteed level of service corresponding to the calling party”?
5. Regarding independent claims 20 and 30, and dependent claims 8 and 13, does US 6,304,567 to Rosenberg (“Rosenberg”) teach a “session identifier” or “an identifier for the established communication link”?
6. Regarding dependent claim 13, do Turock, Guy, and Rosenberg implicitly disclose the sending of “communication samples” and the forwarding of those samples to a first central office on “an assigned trunk line based on [an] identifier”?
7. Regarding dependent claims 21-22, does Rosenberg teach a “predetermined communications path”?

## **VII. GROUPING OF CLAIMS**

1. Claims 1, 6, 7, and 18 rise and fall together. *See* Issue No. 1.
2. Claims 2-4 rise and fall together. *See* Issue Nos. 1-3.
3. Claim 5 rises and falls alone. *See* Issue Nos. 1 and 4.
4. Claims 8-12 rise and fall together. *See* Issue Nos. 1 and 5.
5. Claims 13-16 rise and fall together. *See* Issue Nos. 1, 5, and 6.
6. Claims 17 and 19 rise and fall together. *See* Issue Nos. 1 and 2.
7. Claims 20, 28-29, and 30-34 rise and fall together. *See* Issue No. 5.
8. Claims 21-22 rise and fall together. *See* Issue Nos. 5 and 7.
9. Claims 35-36 rise and fall together. *See* Issue No. 2.
10. Claim 37 rises and falls alone. *See* Issue Nos. 2 and 3.

Reasons for separate patentability of the above-indicated Claim Groups 1-10 are presented in the Arguments section pursuant to 37 C.F.R. § 1.192(c)(5).

## **VIII. ARGUMENT**

### **A. Background**

The Examiner has rejected all of the pending claims, except Claim 11. Claims 1-10, 12-19, and 30-37 are rejected as being obvious under 35 U.S.C. §103(a) in light of various combinations of Turock, Guy, US 5,483,587 to Hogan (“Hogan”), and Rosenberg. Claims 20-22 and 28-29 are rejected as being obvious under 35 U.S.C. §103(a) in light of the combination of FRC 1798 – “INETPhone: Telephone Services and Servers on Internet” by Yang (“Yang”), Guy, Hogan, and Rosenberg. The Examiner has indicated that Claim 11 would be allowable if re-written in independent form.

The primary reference relied on by the Examiner in rejecting claims 1-10, 12-19, and 30-37 is Turock. Turock discloses a system whereby a first party can use a conventional telephone to call a second party, wherein the audio information conveyed between the two parties is transferred over the Internet. (Turock, Abstract.) Turock requires a user to dial the number of a first ITS (Internet Telephony Server) node, which then prompts the user for the number that the user wishes to call. (Turock, 6:36-48.) The first ITS node then connects the call to a second ITS node, which in turn connects the

user to the called party. (Turock, 5: 43-46.) The first ITS node uses a Least Cost Routing (LCR) Module “to locate the ITS node that can route the call at the receiving end in the most cost efficient manner.” (Turock, 9: 27-30.) In other words, the LCR determines how to route the call at the time the call is made, and does not use a predetermined path. (Turock, 12: 41-44.) Significantly, the level of service to be provided is not a factor in determining how to route a call in Turock, which teaches simply that quality techniques may or may not be applied to a call, once a network path has been determined and a connection has been established. (Turock, 13: 13-17.) In fact, Turock teaches applying techniques to improve voice quality *after* a call has been routed. (Turock, 12: 12-24.)

The Examiner has used Guy as a secondary reference in rejecting claims 1-10, 12-19, 20-22, 28-29, and 30-37. Guy is directed toward transmitting voice and data signals from a conventional telephone across a network. (Guy, 3: 39-56; 4: 54-67.) Guy teaches that bandwidth is allocated for a call (Guy: 11: 52-63), but does not teach any method for determining how the call is to be routed, or that a specific route or path is predetermined for the call.

Further, the Examiner has used Rosenberg as a secondary reference in rejecting claims 20-22 and 28-34. Rosenberg teaches multiplexing voice communications signals onto the Internet (Rosenberg, Abstract) using Internet telephone gateways (ITGs) to connect the telephone system to the Internet. (Rosenberg, 3: 13-22.) Rosenberg teaches opening and maintaining connections through which a call may be sent. (Rosenberg, 5: 44-47.) Rosenberg also teaches a channel ID associated with these connections, and further teaches that “channel IDs will be re-used as various users initiate and terminate their telephone calls.” (Rosenberg, 5: 45-47.)

#### **B. Claims Rejected as Unpatentable Over Turock In View Of Guy**

Claims 1-7, 17-19, and 35-37 were rejected in the Final Office Action (page 2) as being unpatentable over Turock in view of Guy. Because the combination of Turock and Guy fails to teach the claim limitations discussed below, claims 1-7, 17-19, and 35-37 are in condition for allowance, as are claims 8-16, each of which depends directly or indirectly from one of claims 1-7.

**1. Issue No. 1: Lack of Motivation to Combine Turock and Guy**

Independent claim 1 recites “allocating a resource on the wide area packet switched network sufficient to provide a guaranteed level of service through the wide area packet switched network”. Claim 1 further recites “selectively establishing a communication link, via the resource at at least the guaranteed level of service, between the first telephony server and the second telephony server through the wide area packet switched network, to establish communication between the calling and called parties.” The Final Office Action (page 3) admits that Turock does not teach these claim limitations. However, the Examiner maintains that these limitations would have been obvious over Turock in view of Guy.

In fact, the Examiner has shown no motivation to combine Turock and Guy. The Final Office Action (page 11) states simply that

Turock clearly suggests that one of ordinary skill in the art would apply a number of different techniques to improve voice quality in the call setup message. Guy discloses a method for improving the quality of the voice signal by allocating the bandwidth along a predetermined path between the gateways for routing the voice path by using a RSVP [resource reservation protocol]. Therefore, it would have been obvious to one of ordinary skill in the art to apply the teaching of Guy into Turock’s system in order to obtain a quality voice signal at the destination as claimed [in claims] 1-7, 17-19 and 35-37.

The Examiner’s statement gives no reason for one of ordinary skill in the art to have applied the technique allegedly taught in Guy to Turock’s “call setup message”, but rather simply asserts that it would have been obvious to do so. Moreover, one of ordinary skill in the art would not have understood Turock and Guy to have been capable of the combination asserted by the examiner, because Turock’s “different techniques to improve voice quality in the call setup message” are applicable to a connection that has been established between two points in a network, whereas Guy’s “method for improving the quality of the voice signal” is applied before any connection is established.

The Advisory Action mailed January 16, 2004 further explains that the Examiner is relying on the following statement in Turock to establish a motivation to have combined Turock and Guy: “Line Quality Monitor or LQM 522 examines the sampled

voice data and applies a number of different techniques to improve the voice quality.” (Turock, 12: 12-14.) Inasmuch as Turock suggests neither “allocating a resource on the wide area packet switched network sufficient to provide a guaranteed level of service”, nor “selectively establishing a communication link, via the resource at least the guaranteed level of service”, Turock would not suggest the limitations of claim 1 even if that reference did suggest “a number of different techniques to improve voice quality.” Turock’s Line Quality Monitor simply is not directed toward improving *network* performance. Thus, the examiner’s statement, when placed in context, makes clear that Turock supplies absolutely no suggestion to combine with Guy.

Instead, Turock teaches use of data compression to conserve network resources “during periods of high volume traffic.” (Turock, 11: 51-62.) In fact, data compression is the exclusive means taught by Turock for enhancing the performance of network resources. (Turock, 10:29-33.) However, Turock also notes that as the data compression ratio increases, audio quality may decrease. (Turock: 11: 62-64, 12: 9-10.) Therefore, Turock’s Line Quality Monitor uses “a number of different techniques”, such as an echo cancellation filter” or “variable attenuation”, to improve audio quality. (Turock, 12: 12-17.)

Turock makes clear that its Line Quality Monitor has absolutely nothing to do with “allocating a resource on the wide area packet switched network sufficient to provide a guaranteed level of service” or “selectively establishing a communication link”. Turock explains that at least variable attenuation “only needs to be applied to the voice data one time between the two endpoints”. (Turock, 12: 19.) That is, Turock’s teaching is directed toward a network path that has *already been established*. Turock teaches at most improving the quality of a particular audio communication, and contains no teaching or suggestion regarding allocating resources on a network to provide a guaranteed level of service. One of ordinary skill could have taken no suggestion about how to improve network performance by allocating resources on a network from a teaching directed to improving audio quality between two endpoints that have already been established.

For at least the foregoing reasons, claim 1, as well as claims 2-19 depending therefrom, are patentable.



**2. Issue No. 2: “Predetermined Communication Path” (Claims 2-4, 17, 19, and 35-37)**

Claims 2-4, 17, 19, and 35-37 all recite a “predetermined communication path.” The Final Office Action (pages 3-4, 11) asserts that both Turock and Guy teach the recited “predetermined communication path.” In fact, Turock clearly does not teach the recited limitation, nor does Guy. Moreover, as noted above, even if Guy did teach a “predetermined communication path”, no motivation exists to modify Turock with such a teaching.

The Examiner’s position (Final Office Action, page 11) is that “Turock discloses a routing and administration server for storing the routing path between the gateways such as LCR [Least Cost Routing].” However, with respect to its LCR module, Turock simply states that

Before establishing an Internet voice connection, ITS Node 206 utilizes Least Cost Routing (LCR) module 514 in order to locate the ITS Node that can route the call at the receiving end in the most cost efficient manner. To perform this function, LCR 514 first matches the characteristics of the destination telephone number (called party telephone number) with data stored in a local database. . . . After searching the database, LCR 514 indicates the optimal location of the receiving ITS Node for processing the particular call. Additionally, the above database may also include alternate ITS node information so that *LCR 514 may also provide CIM 514 with the next most optimal ITS Node, and so on, so that if the optimal ITS Node is unavailable or cannot handle the call, CIM 510 can then attempt to place the call using the next most optimal receiving ITS Node.* (Turock, 9:27-54; emphasis added.)

In short, Turock does not determine ahead of time any particular path through the Internet that data packets will take to travel between the calling party’s ITS server and the called party’s ITS server. Turock clearly requires determining a communication path when a call is placed, as opposed to using a *predetermined* path when placing a call. Indeed, as the statement emphasized above makes clear, Turock teaches away from the concept of a predetermined communication path because in teaching that the LCR will attempt to use a succession of possible receiving ITS nodes, Turock teaches that a communication may travel over more than one possible path. In Turock, the communication path cannot be

predetermined, because otherwise the LCR could not use the most optimal ITS node available as taught.

The Examiner has also taken the position, without any explanation or citation, that “Guy discloses that a gateway obtains a routing path from a routing and administration server and send[s] a call setup for allocating the bandwidth for the call between the gateways via a predetermined path between the gateways.” (Final Office Action, page 11.) However, in asserting that Guy teaches a predetermined communication path the Examiner has imported into Guy a teaching that this reference simply does not contain. Guy simply makes no mention or suggestion of a predetermined communication path, the Examiner’s assertion notwithstanding. Guy teaches no more than using the RSVP protocol for “reserving bandwidth across the WAN 104” after identifying merely “the *amount* of bandwidth to be reserved”, and makes absolutely no teaching of a predetermined communication path. (See Guy 11: 45-63; emphasis added.) Allocating bandwidth is clearly different from using a predetermined communication path, and in fact Guy teaches against a predetermined communication path inasmuch as Guy teaches bandwidth being allocated *as a call is made*. (See Guy, Fig. 5.)

Moreover, even if Guy did teach a predetermined communication path, the Examiner has stated absolutely no motivation for one of ordinary skill in the art to have modified Turock with such a teaching from Guy. In fact, as noted above, both Turock and Guy actually teach away from a predetermined communication path. Clearly, it would not have been obvious to have modified either Turock or Guy to implement this limitation.

For at least these additional reasons, pending claims 2-4, 7, 17, 19, and 35-37 are allowable over the cited prior art.

### **3. Issue No. 3: “Routing and Administration Server”**

Claims 2 and 37 each recite “sending a routing request via the wide area packet switched network from the first telephony server to a routing and administration server having said routing and administration database.” Turock does not teach a “routing and administration server having said routing and administration database” and that the routing and administration server provides a routing response “via the wide area packet

switched network...” Claims 2-4 and 37 clearly recite that the routing and administration database is maintained on a server located at a node on the wide area network that is different from the separately-recited “first telephony server,” a difference that Turock does not teach or suggest.

The Examiner identifies Turock’s Least-Cost Routing (LCR) module 514 as the “routing and administration database.” (Final Office Action, page 3: 11; *see also id*, page 11.) As Appellants argued in papers filed August 11, 2003 and December 22, 2002, Turock’s LCR module resides in the telephony server ITS node 206, which corresponds to the first telephony server recited in claims 2-4 and 37. (*E.g.*, Turock 6: 28-43; *compare* ITS node 206 in Figures 2 and 5.) Therefore, Turock’s LCR module cannot be said to be a routing and administration “server” that is separate from the “first telephony server”, *i.e.*, ITS node 206. Moreover, because Turock’s LCR module resides in the ITS node 206, it is impossible for the first telephony server, *i.e.*, Turock’s ITS node 206, to receive a routing response from the LCR “via the wide area packet switched network”, as recited in claims 2-4 and 37. In sum, in reciting a routing and administration database on a server separate from the first telephony server, claims 2-4 and 37 contain clear structural differences from the prior art of record.

For at least these reasons, claims 2-4 and 37 are allowable over the cited prior art.

#### **4. Issue No. 4: “Guaranteed Level of Service”**

Claim 5 depends from claim 1 and further recites that “the identifying step comprises accessing said routing and administration database within said first telephony server to obtain the identity of said second telephony server and the guaranteed level of service corresponding to the calling party.” That is, a guaranteed level of service parameter corresponding to a calling party is stored in the routing and administration database on the first telephony server, and the stored guaranteed level of service parameter is retrieved from the database when a call is initiated. Page 11 of the Final Office Action asserts that Guy (col. 11, line 45 – col. 12, line 21) contains the afore-described teaching. However, a careful reading of the cited section of Guy yields no support for the Examiner’s assertion.

As noted above, Guy cannot be said to teach a routing and administration server as recited in Appellants' claims. The Examiner offers no explanation as to why he believes that Guy teaches Appellants' claim limitations, but may rely on Guy's statement that a "priority management unit" is used "to request a reservation of bandwidth across the WAN." (Guy, col. 11, lines 60-61.) The Examiner appears to equate Guy's request for a reservation of bandwidth with obtaining a guaranteed level of service from a routing and administration database. However, inasmuch as Guy teaches that "[t]he call request packet *includes* an indication as to whether 520 a call priority is to be requested" (Guy, col. 11, lines 50-51; emphasis added), Guy clearly teaches against the concept of *retrieving* a guaranteed level of service parameter associated with the calling party from a routing and administration data base. More importantly, the Examiner provides absolutely no motivation for one of ordinary skill in the art to have modified Turock with this alleged teaching of Guy.

For at least these reasons, claim 5 is allowable over the cited prior art.

**C. Issue No. 5: "Session Identifier"**

The Examiner rejected claims 8-10 and 12-16 under 35 U.S.C. §103(a) in light of Turock, as modified by Guy and Rosenberg. Claim 9-10 and 12 depend from claim 8, which recites "generating a session identifier identifying a call attempt between the calling party and the called party." Claims 14-16 depend from claim 13, which similarly recites "receiving at the first telephony server first data packets carrying an identifier for the established communication link."

Further, the Examiner rejected claims 20-22 and 28-29 under 35 U.S.C. §103(a) in light of Yang, as modified by Hogan, Guy and Rosenberg. Claims 21-22 and 28-29 depend from claim 20, which includes the limitation of "in a first telephony server connected to a first telephone system, receiving via a wide area packet switched network a first data packet transmitted by a second telephony server of a second telephone system, the first data packet having . . . (2) a session identifier."

Further, the Examiner rejected independent claim 30 under 35 U.S.C. 103(a) in light of Turock, as modified by Rosenberg. Claims 30 recites the step of "generating a

session identifier identifying a call attempt between the calling party and the called party” and transmitting that session identifier between the two telephony servers.

The Examiner concedes that neither Turock, Yang, Guy, nor Hogan disclose a session ID and channel ID. In each of the afore-mentioned claim rejections, the Examiner relies on Rosenberg to allegedly cure that deficiency.

While Rosenberg references a “channel identifier” (*e.g.*, Rosenberg, 5: 54-6:31), Rosenberg does not disclose a “session identifier”, as recited in claims 8, 20 and 30. As is clear from claim 8, which explicitly recites that the session identifier identifies “a call attempt between the calling party and the called party”, the session identifier relates not to a communications channel but to a particular call session. The “channel identifier” in Rosenberg identifies a particular communication channel, but does not correspond necessarily to a particular call attempt or call session. In fact, as explained below, in most cases Rosenberg’s channel ID will be related to multiple call attempts. Further, Rosenberg does not suggest sending a session identifier in a data packet to a telephony server, as required by claims 8, 13, 20, and 30.

The Examiner argues that “Rosenberg discloses a channel ID which reads on session identifier for a call attempt ‘attempt only one’ between the called and calling party.” (Final Office Action, pages 11-12.) However, this unsupported assertion simply does not demonstrate that Rosenberg reads on the limitation of a “session identifier identifying a call attempt between the calling party and the called party.” Rosenberg teaches keeping multiple connections open simultaneously, and further teaches that these connections can be re-used by different calls. (Rosenberg, 5:44-47.) Thus, when Rosenberg teaches a channel identifier identifying a particular communications channel, that identifier need not, and probably does not, correspond to a particular call attempt. Rosenberg is very clear that the disclosed channel identifier does not identify a particular call session: “channel IDs will be re-used as various users initiate and terminate their telephone calls.” (Rosenberg, 5: 45-47.) Rosenberg’s channel ID is plainly incapable of functioning as a session identifier.

These are additional reasons why claims 8-10 and 12-16, 20-22, 28-29, and 30-34 should be allowed over the cited prior art.

**D. Issue No. 6: “Assigned Trunk Line Based On The Identifier”**

Claim 13, rejected under 35 U.S.C. §103(a) in light of Turock, as modified by Guy and Rosenberg, recites “forwarding the received communication samples to the first central office on an assigned trunk line based on the identifier.”

In their paper filed August 11, 2003, Appellants noted that the prior art of record does not disclose the sending of “communication samples” and the forwarding of those samples to the first central office on “an assigned trunk line based on the identifier”. The Examiner then took the position that Turock, Guy, and Rosenberg “implicitly disclose[] this step otherwise the communication signal cannot transmit to the central office as claim[ed].” (Final Office Action, page 12.) The Examiner’s position is unfounded. Regardless of whether the communication signal requires a trunk line to transmit to the central office, this is not the same as “an *assigned* trunk line based on *the identifier*.” Appellants can think of no reason – and the Examiner supplies none – why a trunk line could not be used without having been assigned based on an identifier. The prior art of record simply does not teach or suggest the afore-mentioned limitation of claim 13, nor is it required by the operation of the references.

For at least these reasons, claim 13, as well as claims 14-16 depending therefrom, are allowable over the cited art.

**E. Issue No. 7: “Predetermined Communication Path” (Claims 20-21)**

The Examiner rejected claims 20-22 and 28-29 under 35 U.S.C. §103(a) in light of Yang, as modified by Hogan, Guy and Rosenberg. Dependent claims 21 and 22 both recite a “predetermined communication path”, which, as discussed above, is not disclosed by either Turock or Guy.

In the Final Office Action, the Examiner argues on page 12 that both Guy and Rosenberg teach a predetermined communication path with respect to claims 21 and 22. Appellants addressed this argument above with respect to Guy. Further, the cited portion of Rosenberg teaches keeping a connection open for multiple voice calls between locations (Rosenberg, 3: 24-28), *not* using a predetermined communication path for a call between two particular telephony servers. Rosenberg teaches that, if a channel is already open between the source and destination of a particular call, the call will use that channel.

(Rosenberg, 4: 45-52.) However, the route taken by packets between the source and the destination is not pre-determined; rather, channels are established as needed and then kept open as long as they are being used for any call. (Rosenberg, 4:35-52; 5: 44-47.)

The present invention, in contrast, uses predetermined, *i.e.*, statically established, paths. Appellants' specification (page 34: 6-16) explains that

a complete virtual path having a predetermined bandwidth between two ITSs 72 can be established by forming a sequence of routers, each having predetermined path segments for transporting data packets along the virtual path to the next router or node. The virtual path is initially arranged by contracting with the Internet service provider controlling each router 84' and any associated Autonomous System (AS) with the table 92 to guarantee the desired bandwidth along the virtual path.

Thus, Appellants' specification makes clear that a predetermined communications path is one which has been statically determined and programmed before any call is ever made between two points in the network. Rosenberg, in contrast, teaches that a call uses whatever channel happens to be open between two nodes in the network, or uses whatever channel is newly established for the call. Clearly, Rosenberg does not teach the *predetermined communication path* recited in Appellants' claims.

For at least this reason, claims 21-22 are allowable over the cited prior art. Further, claims 20 and 28-29 are allowable at least for the reasons discussed above regarding the failure of Rosenberg to teach the session identifier recited in claim 20.

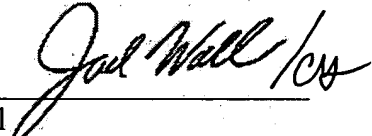
## **IX. CONCLUSION**

In view of the foregoing arguments, Appellants respectfully submits that the pending claims are novel over the cited references. The Examiner's rejection of Claims 1-10, 12-22 and 28-37 is improper because the prior art of record does not teach or suggest each and every element of the claimed invention. In view of the above analysis, a reversal of the rejections of record is respectfully requested of this Honorable Board.

Appellants believe no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 07-2347, under Order No. 00-VE22.07A from which the undersigned is authorized to draw. To the extent necessary, a petition for extension of time under 37 C.F.R. § 1.136 is hereby made, the fee for which should be charged to the above account.

Dated: May 28, 2004

Respectfully submitted,

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## **X. APPENDIX – CLAIMS ON APPEAL**

1. A method of telecommunication over a wide area packet switched network, the method comprising:

sending from a calling party a called number, corresponding to a called party and including an area code, to a first central office connected to a first telephone system;

forwarding the called number from the first central office to a first telephony server, connected to the first telephone system and in communication with the wide area packet switched network, via a signaling channel of the first telephone system;

identifying a second telephony serve, in communication with the wide area packet switched network and serving said called party in a second telephone system, from a routing and administration database by using at least said area code;

sending the called number from the first telephony server to the second telephony server via said wide area packet switched network;

allocating a resource on the wide area packet switched network sufficient to provide a guaranteed level of service through the wide area packet switched network; and

selectively establishing a communication link, via the resource at at least the guaranteed level of service, between the first telephony server and the second telephony server through the wide area packet switched network, to establish communication between the calling and called parties.

2. The method of claim 1, wherein the identifying step comprises:

sending a routing request via the wide area packet switched network from the first telephony server to a routing and administration server having said routing and administration database, the routing request including said area code; and

receiving from the routing and administration server via the wide area packet switched network a routing response including the identity of said second telephony server and a predetermined communication path corresponding to the second telephony server.

3. The method of claim 2, wherein the identifying step further comprises

using a second predetermined communication path within said wide area packet switched network to send and receive the routing request and routing response, respectively.

4. The method of claim 2, wherein the routing request includes a calling number of the calling party, the identifying step further comprising obtaining the guaranteed level of service corresponding to the calling number from the routing response.

5. The method of claim 1, wherein the identifying step comprises accessing said routing and administration database within said first telephony server to obtain the identity of said second telephony server and the guaranteed level of service corresponding to the calling party.

6. The method of claim 1, wherein the identifying step comprises receiving a network address of the second telephony server on the wide area packet switched network.

7. The method of claim 6, wherein the step of sending the called number from the first telephony server to the second telephony server comprises sending a first signaling data packet carrying the called number as payload data and the second telephony server network address as a destination address to a router selectively routing data packets within the wide area packet switched network, the router sending the first data packet via a predetermined communication path based on the destination address.

8. The method of claim 7, wherein the step of sending the called number from the first telephony server to the second telephony server further comprises:

generating a session identifier identifying a call attempt between the calling party and the called party; and

including the session identifier in said first signaling data packet.

9. The method of claim 8, wherein said selectively establishing step

comprises:

receiving a second signaling data packet from the second telephony server including the session identifier and a condition of the called party; and

sending from the first telephony server first traffic data packets having said destination address and carrying digital communication information and said session identifier based on the condition of the called party.

10. The method of claim 9, wherein the first traffic data packets sending step comprises outputting the first traffic data packets at least at a minimum data rate according to the guaranteed level of service.

12. The method of claim 9, further comprising:

sensing at the first central office a condition of the calling party;

sending to the first telephony server a message indicating the sensed condition of the calling party;

suspending the transmission of said third data packets by said first telephony server in response to the message; and

transmitting from the first telephony server to the second telephony server a third signaling data packet including the session identifier and the condition of the calling party.

13. The method of claim 1, further comprising:

receiving at the first telephony server first data packets carrying an identifier for the established communication link and communication samples from the called party via the wide area packet switched network;

forwarding the received communication samples to the first central office on an assigned trunk line based on the identifier; and

supplying the communication samples received on the assigned trunk line from the first central office to the calling party.

14. The method of claim 13, wherein the communication samples include at

least one of voice samples and data words.

15. The method of claim 13, further comprising:

receiving at the first telephony server a second data packet carrying an identifier for the established communication link and signaling information indicating a condition of the called party;

generating a signaling message to the first central office from the first telephony server based on the signaling information; and

in the first central office, initiating a response for the calling party based on the signaling message.

16. The method of claim 15, wherein the response initiating step comprises disconnecting the calling party from the communication link.

17. The method of claim 1, wherein the selectively establishing step comprises:

setting the communication link along a predetermined communication path within said wide area packet switched network; and

changing a data rate of the communication link based on traffic on the predetermined communication path.

18. The method of claim 1, wherein the wide area packet switched network is Internet, the identifying step comprising translating an Internet Protocol (IP) address of the second telephony server from the area code.

19. The method of claim 18, wherein the sending step comprises outputting from the first telephony server first packets having the IP address of the second telephony server to a router, the router forwarding the first packets along a predetermined communication path based on the IP address of the second telephony server.

20. A method of telecommunication over a wide area packet switched network, the method comprising:

in a first telephony server connected to a first telephone system, receiving via a wide area packet switched network a first data packet transmitted by a second telephony server of a second telephone system, the first data packet having (1) a destination address corresponding to the first telephony server, (2) a session identifier, and (3) a destination number having an area code served by the first telephony server;

initiating a query by the first telephony server for determining via a signaling communication network of the first telephone system a condition of the destination number from a first central office serving the destination number;

sending a second data packet carrying said session identifier and said condition from the first telephony server to the second telephony server;

allocating at least one network resource to support a guaranteed level of service through the wide area packet switched network; and

selectively establishing a communication link via the resource to provide the guaranteed level of service between the first telephony server and the second telephony server through the wide area packet switched network, to enable communication between the destination number and a station served by the second telephony server.

21. The method of claim 20, wherein the selectively establishing step comprises establishing the link on a predetermined communication path in the wide area packet switch network.

22. The method of claim 21, wherein the selectively establishing step comprises changing a data rate of the communication link based on traffic on the predetermined communication path.

28. The method of claim 20 further comprising initiating a line-sided connection between the first telephony server and the destination number in response to the first central office specifying said condition as an available condition.

29. The method of claim 20, wherein the signaling communication network is a common channel interoffice signaling network.

30. A method of telecommunication over a wide area packet switched network, the method comprising:

- sending from a calling party a called number, corresponding to a called party, to a first central office connection to a first telephone system;

- forwarding the called number from the first central office to a first telephony server, connected to the first telephone system and in communication with the wide area packet switched network, via a signaling channel of the first telephone system;

- identifying a second telephony server, in communication with the wide area packet switched network and serving said called party in a second telephone system, from a routing and administration database by using at least a part of the called number;

- generating a session identifier identifying a call attempt between the calling party and the called party;

- sending a signaling message from the first telephony server to the second telephony server via said wide area packet switched network, the signaling message comprising the called number and the session identifier; and

- communicating a plurality of packets containing audio information between the first and second telephony servers through the wide area packet switched network, to establish telephone communication between the calling and called parties, wherein at least some of the packets containing audio information also contain the session identifier.

31. The method as in claim 30, wherein the step of communicating comprises:  
allocating a resource on the wide area packet switched network to communications between the calling party and the called party; and

- communicating the packets containing audio information through the wide area packet switched network using the allocated resource.

32. The method as in claim 30, wherein the identifying step comprises:  
sending a routing request message via the wide area packet switched network

from the first telephony server to a routing and administration server having said routing and administration database, the routing request message including said at least part of the called number; and

receiving from the routing and administration server via the wide area packet switched network a routing response including the identity of said second telephony server and the identity of a predetermined communication path through the wide area packet switched network to the second telephony server capable of providing a guaranteed level of service.

33. The method as in claim 32, wherein:

the routing request message further includes an identification corresponding to the calling party, and

the identifying step further comprises determining the guaranteed level of service based on the identification corresponding to the calling party.

34. The method as in claim 32, wherein the signaling channel of the first telephone system comprises a link from an interoffice signaling network of the first telephone system to the first telephony server.

35. A method of telecommunication over a wide area packet switched network, the method comprising:

sending from a calling party a called number, corresponding to a called party, to a first central office connected to a first telephone system;

forwarding the called number from the first central office to a first telephony server, connected to the first telephone system and in communication with the wide area packet switched network;

identifying a second telephony server, in communication with the wide area packet switched network and serving said called party in a second telephone system, from a routing and administration database by using at least part of the called number;

sending the called number from the first telephony server to the second telephony server via said wide area packet switched network;

establishing a communication link between the first telephony server and the second telephony server, wherein the establishing step comprises setting the communication link along a predetermined communication path within said wide area packet switched network; and

communicating telephone information between the calling and called parties via the servers and the predetermined communication path.

36. The method as in claim 35, wherein the setting of the communication link along the predetermined communication path comprises allocating a resource along the path for the communication link, such that the communication link will provide at least a guaranteed minimum level of service throughout the communication of the telephone information.

37. The method as in claim 35, wherein the identifying step comprises:

sending a routing request via the wide area packet switched network from the first telephony server to a routing and administration server having said routing and administration database; and

receiving from the routing and administration server via the wide area packet switched network a routing response including the identity of said second telephony server and an identification corresponding to the predetermined communication path to the second telephony server.





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<b>TRANSMITTAL OF APPEAL BRIEF</b>			Docket No. 00-VE22.07A (65632-0107)	
In re Application of: James E. Curry et al.				
Application No. <del>09/514,374</del>		Filing Date 02/28/2000	Examiner Steven H. D. Nguyen	Group Art Unit 2665
Invention: INTERNET LONG DISTANCE TELEPHONE SERVICE				
<p style="text-align: center;"><b><u>TO THE COMMISSIONER OF PATENTS:</u></b></p> <p>Transmitted herewith in triplicate is the Appeal Brief in this application, with respect to the Notice of Appeal filed: <u>April 1, 2004</u></p> <p>The fee for filing this Appeal Brief is <u>330.00</u></p> <p><input checked="" type="checkbox"/> Large Entity      <input type="checkbox"/> Small Entity</p> <p><input type="checkbox"/> A check in the amount of _____ is enclosed.</p> <p><input checked="" type="checkbox"/> Charge the amount of the fee to Deposit Account No. <u>07-2347</u> This sheet is submitted in duplicate.</p> <p><input type="checkbox"/> Payment by credit card. Form PTO-2038 is attached.</p> <p><input checked="" type="checkbox"/> The Director is hereby authorized to charge any additional fees that may be required or credit any overpayment to Deposit Account No. <u>07-2347</u> This sheet is submitted in duplicate.</p> <div style="text-align: right;"><p><b>RECEIVED</b> JUN 04 2004 Technology Center 2600</p></div>				
<p style="text-align: center;"><i>Joel Wall /cs</i></p> <p>Joel Wall, Reg. No. 25,648 Verizon Corporate Services Group Inc. 600 Hidden Ridge Drive Mailcode HQE03H14 Irving, TX 75038 (972) 718-4800 Customer No. 32,127</p>			Dated: <u>May 28, 2004</u>	
<p style="text-align: center;"><b>Appeal Brief Transmittal</b></p> <p>I hereby certify that this correspondence is being deposited with the U.S. Postal Service with sufficient postage as First Class Mail, in an envelope addressed to: MS Appeal Brief - Patents, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date shown below.</p> <p>Dated: May 28, 2004      Signature: <i>Christian R. Andersen</i> (Christian Andersen)</p>				